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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,696	12/13/2000	Ernesto Freire	03940022BA	6797

7590

07/02/2002

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EXAMINER

GALITSKY, NIKOLAI M

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 07/02/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/734,696

Applicant(s)

FREIRE ET AL.

Examiner

Nikolai M Galitsky

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 6-10, 13, 15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 2-4, 6-10, 13, 15 and 17 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12-13-00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_.

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### DETAILED ACTION

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Claims 1, 5, 11, 12, 14 and 16 are canceled without traverse as indicated in Paper No. 2, filed 13 December 2000. Claims 2-4, 6-10, 13, 15 and 17 are pending. Applicants' remarks are confusing because the listed pending claims include claim 14, however claim 14 is also indicated as being cancelled. Therefore, it has been assumed that the claim 14 has meant to be cancelled along with the other cancelled claims listed above.

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- Group I      Claims 2, 6 – 10 and 13, drawn to a computer-assisted method for predicting the binding affinity, classified in Class 703, subclass 11.
- Group II     Claims 3 and 17, drawn to a computer-assisted method for building a model of an ideal ligand, classified in Class 702, subclass 27.
- Group III    Claims 4 and 15, drawn to a computer-assisted method ranking each ligand in a set of selected ligands, classified in Class 702, subclass 19.

The inventions are distinct, each from the other because of the following reasons:

The methods of Groups I and II are independent. Inventions are independent if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). Each of the above Groups are directed to distinct methods in that different considerations are required for each as listed with each of the above groups. For example, a

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computer-assisted method of Group I for predicting the binding affinity of selected ligand to a binding target practice, for example, the Woolford algorithm, which is capable of identifying and mapping potential target sites on a target molecule, whereas Group II is invention directed to a distinct method for building a model of an ideal ligand. The inventions of these Groups have different functions, different effects.

The inventions of Groups I and III are patentably distinct. The inventions of Group I is drawn a computer-assisted method for predicting the binding affinity, whereas in contrast Group III is drawn to a computer-assisted method ranking each ligand in a set of selected ligands. The inventions of these Groups have different functions, different effects, and different modes of operation.

The inventions of Groups II and III are patentably distinct. The inventions of Group II is drawn a computer-assisted method for building a model of an ideal ligand, whereas in contrast Group III is drawn to a computer-assisted method ranking each ligand in a set of selected ligands. The inventions of these Groups have different functions, different effects, and different modes of operation.

Therefore, there clearly would be an undue search burden to search all Groups together as each search with minimal overlap would be directed to different inventions thus supporting this restriction requirement as given above.

Applicants are advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR § 1.143).

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Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

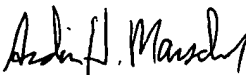
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai Galitsky, Ph.D., whose telephone number is (703) 308-2422. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, William Phillips, whose telephone number is (703) 305-3482 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

June 25, 2002

NMG

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER